Saint Lucia committed to biodiversity conservation.
Government of Saint Lucia, 10 July 2017.

Saint Lucia’s Cabinet of Ministers has demonstrated its commitment to Biodiversity conservation by endorsing a biosafety policy that will regulate the use of genetically modified organisms (GMOs).

The Cabinet further authorized the Attorney General’s Chambers to finalize a Biosafety Bill and is accompanying regulations.

The bill is an output of a biosafety framework that was previously developed and aimed at regulating the use of genetically modified organisms (GMOs), and living modified organisms (LMOs). The initiative began in 2004. The framework included a legislative system, a risk assessment system, a public feedback mechanism, and an administrative system for the handling of requests to use GMOs, and laboratory testing facilities.

For more information see page 6

Agriculture in the News is a weekly newsletter which provides a compilation of selected news articles on issues affecting agriculture in the Caribbean region. Articles from Newspapers, Online News Service Agencies, Newsletters and Press Releases are featured.

For copies of documents cited, visit the web address or source of the information provided.

Full article

Red Stripe will be engaging an additional 200 farmers to cultivate cassava under its Project Grow initiative.

They will add to the 103 farmers who have already been contracted by the company to grow the crop as a source of raw material to substitute for the imported high-maltose corn syrup used in the production of its world-famous Red Stripe Beer.

The farmers under contract are from the parishes of St. Elizabeth, St. Catherine, St. Ann, St. Thomas, St. Mary, Clarendon and Manchester.

Red Stripe is looking to replace 40 per cent of maltose syrup by 2020 and already has more than 2,000 acres of land under cassava production.

“In terms of Red Stripe farms, we are at 1,000 acres, and with the farmers we have recruited, we now have arable land totalling 1,159 acres,” said Local Raw Material Business Development Manager for Red Stripe, Dr. Cavell Francis-Rhiney.

She was speaking at the signing of a Memorandum of Understanding (MOU) with the United States Agency for International Development (USAD)–funded Jamaica Rural Economy and Ecosystems Adapting to Climate Change II project (Ja REEACH II) to provide technical assistance to boost commercial cassava production.

The signing ceremony was held on July 7 at the Spanish Court Hotel in New Kingston.

Under the agreement, Ja REEACH II will provide support in refining research and training programmes; delivering farmer training; collaborating with local partners to implement research and field trials to identify high-yielding, drought-tolerant cassava varieties; propagate high-yielding planting materials; and identify and test complementary crops for intercropping and rotation.

Ja REEACH II will mobilise its local technical-assistance-delivery team to support the training objectives. This will be complemented by international support from experts from the University of Maryland Eastern Shore, Delaware State University, and Tuskegee University.

The United States-based institutions are partner universities of the ACDI/VOCAn, which is the implementing agency for Ja REEACH.

Teams from Ja REEACH II, Project Grow and the universities conducted site visits to local farms between July 4 and 7, to develop an implementation plan for the technical cooperation.
“Our initiative with Ja REEACH and the universities will push forward the research activities that we have identified as important for the farmers to be successful at this venture,” said Dr. Francis-Rhiney.

Meanwhile, Director of the Office of Environment and Health, USAID Jamaica, Sara Buchanan, expressed support for Project Grow.

“One of particular value are the improved economic opportunities for small-scale farmers and sustainable employment for youth,” she noted.

Ja REEACH II works with Jamaican public- and private-sector organisations to protect and sustain agriculture and natural-resource-based livelihoods.

MANGO


Full article

The annual four-day-Nevis Mango and Food Festival 2017, culminated with rave reviews from patrons who took part in the final event, the Nevisian Chef Mango Fest at the Oualie Beach on July 09, 2017.

Richard Lupinacci, who professes his love for the island’s mangoes, believes that the festival, which is in its fourth year, is gaining in popularity.

“The festival is getting bigger and bigger. It's catching on, it appears to be. I mean the atmosphere speaks for itself. If you look around there is a lot of people here. A lot of good food and good energy. It’s a party! That's Nevis, man! We like to lime!” he said.

Livingston Liburd couldn’t contain his contentment with the event. He described his overall experience including the food and ambiance with glee.

“I’m enjoying everything...It’s just a wonderful atmosphere. The food is good. The music is good. I love the setting. It’s just having a really good time.

“Of course you will see me next year and the year to come and the year to come after. I’ll be here,” he said.
Hon. Lindsay Grant, Minister of Tourism in St. Kitts said the festival is an innovative one and believes it is a good way to make use of the natural fruits in and out of season.

He commended the organisers for introducing the annual festival, an event he has patronised in the past and would continue to do so in the future.

The festival is hosted by the Nevis Tourism Authority (NTA), to celebrate the island’s multiple varieties of mango through the culinary offerings on Nevis. The event entails dining experiences, cooking demonstrations, master cook-along classes conducted by international and local celebrity chefs all concentrating on the local mangoes.

Greg Phillip, Chief Executive Officer of the NTA, expressed satisfaction with the public’s support and the outcome of the new model put together for this year’s festival. He said patrons seem to be having a good time and that’s what the NTA is seeking to do.

“Once they have a good time this year, the likelihood is they will be back next year,” he said.

Regarding the public’s response to the new format, Phillip said based on the public’s response, it appears to have worked.

“Yes the model is working… We have to make changes every year because it’s something that people come to every year. It’s almost the same audience and they have to have something new. We change chefs. We changed the format this year, it seem to have hit the spot,” he said.

Meantime, Hon. Mark Brantley, Deputy Premier of Nevis and Minister of Tourism, expressed satisfaction with the turnout. He said the Festival is growing in stature, size and acceptance and that what was envisioned for it from its inception.

“So we are happy that it’s turning out great. It’s a lot of local people. Lots of tourists mingling enjoying the mango. It’s all about mango.

“As we like to say mango is our sweetest resource. We have over 40 varieties of mango on Nevis the experts say and clearly, mango is to Nevis what I suppose apple pie is to America...It is really an authentic, home grown festival…I think local people should gravitate to,” he said.
Today, 14 July 2017, the role of livestock in achieving the SDGs was the focus of a special event at the High-Level Forum on Sustainable Development. Organized by the International Livestock Research Institute, Heifer International, the Livestock Global Alliance and the Global Agenda on Sustainable Livestock, the session explored why livestock are essential for Agenda 2030.

The discussion built from these statements on the role of livestock in achieving the SDGs:

- Because of livestock’s contribution to individual livelihoods and national economies, we’re not going to end world poverty (SDG1) if we undervalue the major roles livestock play in the economies of developing countries and their peoples.
- Because of livestock’s role in sustainable agriculture and food production, we’re not going to end hunger, achieve food security and make agriculture sustainable (SDG2) without paying greater attention to the animal agriculture that makes small-scale food production viable and renewable on every continent.
- Because of the difference to growth and cognitive development that animal-source foods make for the World’s most vulnerable, healthy lives and the well-being of people of all ages (SDG3) will be unachievable without actions to ensure healthy and safe animal source foods are available for all.
- Because of the unique roles of livestock in women’s lives we’re not going to achieve gender equity and empowerment of all women and girls (SDG5) without deliberate efforts to build upon the multiple and enabling roles that livestock play in female livelihoods worldwide.

Program of the event:

Opening Session

– Welcome and remarks by Chair/Moderator Mr. Jimmy Smith, director general, International Livestock Research Institute (ILRI)

– Remarks by H.E. Ms. Amira Gornass, Ambassador of Sudan to Italy, Permanent Representative of Sudan to the Rome Based Agencies & Chairperson, UN Committee on Food Security (CFS) “mixed farming allows farmers to create a more profitable and sustainable farming system”

– Remarks by Deirdre McGrenra, Chief, Americas Liaison Office, Partnership and Resource Mobilization, International Fund for Agricultural Development (IFAD) “a single pregnant cow can empower a woman. A calf, some milk and it can be the start of a new livelihood”

Panel Discussion – “Livestock and its critical intersection with achieving Agenda 2030”
– Franck C. J. Berthe, World Bank and Livestock Global Alliance “the virtuous circle between
knowledge and operations to unleash the potential of sustainable livestock to deliver on the 2030 Agenda”
– Akoto Osei, Nutrition Director, Heifer International “smallholder livestock interventions can improve diet and early childhood outcomes if we focus on nutrition in the programs”
– Laura Sommer, Swiss Federal Office for Agriculture “Switzerland is a key donor supporting livestock and the SDGs to move forward the Global Agenda for Sustainable Livestock”

Discussion/Question and Answer Period

Summary and Wrap-up

– Closing remarks by Chair/Moderator, Mr. Jimmy Smith (ILRI)

Follow the conversation on Twitter with hashtag SustLivestock

BIOLOGICAL CONTROL


Full article

Human health issues arising from the use of synthetic pesticides and concerns about their environmental toxicity are making lower-risk alternatives increasingly attractive. Biological control agents are living organisms which reduce harmful pest populations. Many people know of the common ladybird, whose larvae feed on aphids, but a wide range or biological control agents – e.g. predatory and parasitic insects, diseases of plant pests – are available. However, their use is still limited, in particular in low- and lower-middle-income countries.

Extension services play a vital role in the uptake of biological control agents by farmers; obviously if they’re being recommended this will increase the chances of farmers adopting them. The study analysed pest control recommendations given by extension services in the Plantwise programme in three African and three Asian countries. It examined factors that affect the uptake of biological control agents by extension services.

Globally, appropriate biological control agents were available for most of the major pests present in the study countries. However, they were often not available at a national level. Nationally available biological control agents were not always included in recommendations by extension services. This might be explained by restricted availability and perceived higher price of biological control agents at local agro-inputs shops, but might also reflect a lack of awareness among extension services of the biological agents that could be used for particular pests. By identifying the factors that affect the uptake of biological control by extension services, the study highlights areas were key players in plant protection can prioritise action to ease their use.
Contributed by Julien Dougoud. To learn more about the uptake of biological control and the factors affecting it, read the full article for free in *BioControl*→ https://rd.springer.com/article/10.1007/s10526-017-9823-y

Citation: Dougoud J., Cock M.J.W., Edgington S. & Kuhlmann U. (2017) A baseline study using Plantwise information to assess the contribution of extension services to the uptake of augmentative biological control in selected low- to lower-middle- income countries. *BioControl*. DOI:10.1007/s10526-017-9823-y

BIOSAFETY – Saint Lucia


**Full article**

Saint Lucia’s Cabinet of Ministers has demonstrated its commitment to Biodiversity conservation by endorsing a biosafety policy that will regulate the use of genetically modified organisms (GMOs).

The Cabinet further authorized the Attorney General’s Chambers to finalize a Biosafety Bill and is accompanying regulations.

The bill is an output of a biosafety framework that was previously developed and aimed at regulating the use of genetically modified organisms (GMOs), and living modified organisms (LMOs). The initiative began in 2004. The framework included a legislative system, a risk assessment system, a public feedback mechanism, and an administrative system for the handling of requests to use GMOs, and laboratory testing facilities.

From 2012 - 2017, officials from the ministries of health, agriculture, sustainable development, education, and commerce, worked with consumer groups, faith based organisations, and other key stakeholders to implement the biosafety framework, from which was derived the biosafety policy.

The legislation regulates the use and creation of genetically modified organisms (GMOs), and living modified organisms (LMOs) through a licensing system, and will solicit background information on persons wishing to use or import GMOs into the country.

The Biosafety Bill establishes bodies of technical and scientific experts who will review applications, assess risks, and determine whether the genetically modified product poses any negative impact to human health and the environment, and how these can be avoided.

The biosafety regulations also assign fines of up to $10,000 for persons importing, using, creating or transporting a GMO without the required license.
The public will be given opportunities to review the Biosafety Bill and Regulations before it is enacted. Copies of the documents can be viewed on lc.biosafetyclearinghouse.net and on the Government of Saint Lucia’s web portal, govt.lc. A public consultation will also be held at 9 a.m. on July 13, in the conference room of the Department of Fisheries in Castries.

By enacting the biosafety legislation, Saint Lucia has signaled its commitment to conserving its unique biological resources so that they continue to contribute to agriculture, tourism, food security, and innovation, for present and future generations. This includes the development of robust laws, fully trained human resources and empowered members of the public who will be active in the decision making process as well as monitoring and enforcement of the law.

For more information on the biosafety framework and legislation visit lc.biosafetyclearinghouse.net, call 758.451.8746 or email slubiosafety@govt.lc.

The endorsement of the biosafety policy was announced on Wednesday, May 3.

**Attachments:** BIOSAFETY BILL FINAL2017.docx

**Predicting local biodiversity responses to population pressures** by ILRI Communications. CGIAR Research Program on Livestock (LIVESTOCK), 10 July 2017
https://livestock.cgiar.org/2017/07/10/predicts/

**Full article**

A global database helps identify how land use and related pressures have influenced the occurrence and abundance of species and the diversity of ecological assemblages.

Human activities have caused major changes in biological communities (animal populations and plants) worldwide, affecting biodiversity and ecosystem function. Understanding how land use and related pressures influence global biodiversity at a local scale can help make predictions of future changes.

Bringing more than 500 scientists worldwide, the PREDICTS project (Projecting Responses of Ecological Diversity in Changing Terrestrial Systems) uses a meta-analytic approach to investigate how local biodiversity typically responds to pressures like land-use change, pollution, invasive species and infrastructure. Since 2012, this global database has collated data on local biodiversity at different levels of human pressure from published studies.

In a recently published paper in Ecology and Evolution, the project team outlines how the database can help in answering a range of questions in ecology and conservation biology. The PREDICTS database will be useful to researchers and international efforts wishing to model and understand the global status of biodiversity.
**RENEWABLE ENERGY**

**CCREEE to be established in Barbados.** By Cathy Lashley, Barbados Government Information Service (GIS), 8 July 2017.
http://gisbarbados.gov.bb/blog/ccreee-to-be-established-in-barbados/

Full article

A Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) is being established in Barbados to support and coordinate the execution of regional renewable energy and energy efficiency projects and programmes.

CARICOM Heads of Government signed the agreement to establish the centre on Thursday, during the final Business Session of the Thirty-Eighth Regular Meeting of the Conference of Heads of Government of the Caribbean Community (CARICOM).

According to a statement from Barbados’ Ministry of Foreign Affairs, the decision to create the centre is a response to the difficult energy situation being faced in many CARICOM Member States, as they simultaneously face the challenges of affordable energy services, energy security and climate change mitigation and adaptation.

“It is envisaged that by developing their renewable energy sources and putting in place energy efficiency measures, many of the islands will now have significant opportunities to reduce their overall fossil fuel consumption. This should lead to an improvement in their energy security, and promote economic growth and enhanced competitiveness,” the Ministry said.

The centre is being established with the assistance of the United Nations Industrial Development Organisation (UNIDO); the Small Island Sustainable Energy and Climate Resilience Initiative (SIDS DOCK); the Government of Austria; and a number of other international development partners. The CCREEE is one of other regional sustainable energy centres for Small Island Developing States being established in the Pacific, Africa and the Indian Ocean.

During the period 2017 to 2018, the revenues of the Centre will be derived from annual contributions from UNIDO, SIDS DOCK and the Austrian government; and voluntary contributions from the Contracting Parties and regional organisations. Thereafter, it will be funded by voluntary contributions from CARICOM Members and Associate Members.

The Council for Trade and Economic Development will have general oversight of the Centre.
Combining satellite data technology and historical data is reducing transaction costs for insurers, enabling affordable crop insurance options for farmers.

Smallholder farmers, especially those rely on rainfall to feed their crops and cattle, are particularly vulnerable to climate fluctuations. In a bad year, drought or flooding can wipe out farmers’ entire means of livelihood. Agricultural index insurance can help alleviate farmers from the risk of losses and falling into debt. However, there are challenges to designing cost-effective insurance products based on good data that help determine timely and accurate payouts.

CCAFS and the CGIAR Research Program on Water, Land and Ecosystems (WLE) work with partners to develop and bring climate-smart agricultural practices and climate services, including index-based insurance, for smallholder farmers. Through collaboration with Bajaj Allianz, a private insurance company, and government agencies and institutions, an insurance scheme called Index-based Flood Insurance (IBFI) was successfully developed and trialed in Bihar, India after a flood in August 2016. A combination of satellite technology and historical data is enabling insurers in the developing world to offer smallholder farmers affordable insurance products that help increase their resilience to climate change impacts.

In a recent blog post published on the WLE website, Giriraj Amarnath, explains:

To develop effective payout schemes for low-income, flood- or drought-prone communities, IBFI integrates hi-tech flood modeling, satellite imagery, and on-the-ground information to predetermine environmental risks, such as floods or droughts, to farmers in an accurate, cost effective, and speedy manner.

Determining crop yield using satellite images has been a real break-through. Being able to calculate how much crop yield a farmer will have allows insurance companies to cheaply and quickly determine: a) how much to insure for; b) the extent of loss after a disaster and; c) how much to pay affected farmers.

The key is establishing a vegetation index. This is done by comparing highly detailed satellite images of vegetated cropland with information collected on the ground about the agricultural productivity of farms. Government departments have been measuring crop yield for years, using techniques like crop cutting experiments (CCE), in which a square meter of crop is cut and weighed to determine yield. By comparing the satellite images against these ground-tested methods,
scientists can create a correlation between the crop yield and the vegetation coverage in the image - thereby creating a vegetation index.

By using multiple sources – including remote sensing data, plot-specific geo-tagged crop growth information, and crop production data from government departments – to create this vegetation index, the potential crop yield of huge swaths of land can be precisely determined. All of this can be done using freely available satellite data and open software, like Google Earth.

Read the full article and find out more about this research: High-tech insurance product boosts smallholders’ resilience to floods and droughts. By Giriraj Amarnath, CGIAR Research Program on Water, Land and Ecosystems, 29 May. https://wle.cgiar.org/thrive/2017/05/28/high-tech-insurance-product-boosts-smallholders'-resilience-floods-and-droughts


Full article

Are you a farmer who wants to keep better track of the climate conditions around you? There’s an app for that.

A group from the USDA Agricultural Research Station (ARS) has introduced a web-based application to help. It allows users to access important historical information about the past climate in their area. This could allow them to better plan for the current year.

“We wanted to make an application that addresses some of the most basic questions that producers tend to ask about the current year’s weather,” explains Steven Mauget of ARS. “How does this year's rainfall or growing degree days compare with recent years? Are soil conditions warm enough to plant? When does first freeze usually occur in my area?”

The data in the application comes from mesonet weather stations. A mesonet is a network of weather stations placed at a certain distance from each other — usually about 20 miles apart. These closely-spaced stations shed light on local weather features associated with thunderstorms and gust fronts.

The web application can be used by anyone interested in the data, such as farmers, certified crop advisers, and extension agents. It mainly covers the ten-county area surrounding the city of Lubbock, TX. It also covers the Rolling Plains to the east of the city.

“These weather features occur over ‘mesoscale’ spatial scales,” Mauget says. “They are kind of midway between small scale features like dust devils and storm clouds and larger scale features like the low and high pressure systems that might extend across many states.”
In most regions, the spatial separation of stations in normal weather networks are too far apart to detect these weather events that are important to farmers and ranchers, he adds.

The web application presents data from the previous ten years. Mauget says that traditionally, people study climate over longer periods, such as thirty years. More recently however, as climate is changing in some regions, it can be defined in periods as short as ten years.

The new tool provides important information such as soil temperature, cumulative growing degree days, and cumulative precipitation. It also gives first freeze dates and cumulative freeze hours, among other data.

In West Texas, the leading crop is cotton and it can’t be planted until the soil is warm enough. This makes the soil temperature important. Growing degree days help producers predict crop development.

Knowing when the first freeze is going to hit or how many hours’ temperatures will be below freezing is also helpful for farmers needing to harvest a crop. The web application will provide this information from the past ten years, too.

“On a year-to-year basis farming can be kind of a seat-of-the-pants affair,” Mauget says. “The general idea was that by comparing the development of this year’s conditions with those of the past ten years, producers might be able to get a better intuitive feel for how the current year might play out weather-wise and yield-wise.”

While the information doesn’t technically forecast or predict upcoming weather, the application was designed to be potentially useful over the course of a growing season. It does this by allowing comparisons over the years. Producers access the information on a secure web browser on a computer.

The researchers hope to expand their web application to include more areas of the state and the country. However, funds and resources are significant barriers as gathering this kind of data can be expensive.

“I think this work shows a way that mesonet data can be used as an applied climate resource,” he says. “As water becomes less abundant in Texas aquifers, farmers are becoming more dependent on rainfall so it’s important for them to have more knowledge about their growing environment.”

Read [more about this work in Agronomy Journal](https://www.csrl.ars.usda.gov/wewc/WestTXClimMonitor/index.php). The application can be found at [https://www.csrl.ars.usda.gov/wewc/WestTXClimMonitor/index.php](https://www.csrl.ars.usda.gov/wewc/WestTXClimMonitor/index.php). This work was supported by the National Oceanic and Atmospheric Administration’s National Mesonet Project and Texas Tech University.
SOIL AND WATER MANAGEMENT

Valuing Water – Regional Consultations. Global Water Partnership (GWP), 30 June 2017
http://www.gwp.org/en/we-act/campaigns/high-level-panel-on-water-valuing-water-initiative/

Full article

The UN Secretary-General and the World Bank Group President convened a High Level Panel on Water (HLPW) in January 2016. One of its aims is to develop a set of shared principles to motivate and encourage governments, business, and civil society to consider water’s multiple values and to guide the transparent incorporation of these values into decision-making. A concept paper, “Valuing water: preamble and principles”, was prepared as a discussion document for consultation with stakeholders. Because of its large and diverse multi-stakeholder network, Global Water Partnership (GWP) has been asked to facilitate regional consultations to support the work of the HLPW.

Purpose

The purpose of the regional consultations is to obtain views from a wide array of regional and country level stakeholders on the proposed HLPW Valuing Water principles. These consultations will build awareness and examine the regional/country level relevance of global perspectives, and provide inputs, actions, and recommendations that will enhance resolutions from the HLPW.

The consultations include interactive discussions on the principles and feedback on action steps to take the principles forward. Participants represent diverse stakeholders, including NGOs/CSOs, indigenous peoples, faith-based groups, government, academia, women, youth, and private sector organisations, from the water sector as well as related sectors.

Scope

The consultations are taking place in selected countries and are facilitated by GWP. The list of countries where consultations are planned is given below, subject to change.

<table>
<thead>
<tr>
<th>HLPW host country</th>
<th>Proposed date</th>
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<tbody>
<tr>
<td>South Africa</td>
<td>30 May</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>6 July</td>
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<td>Mexico</td>
<td>24 July</td>
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<td>Senegal</td>
<td>To be determined</td>
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<tr>
<td>Bangladesh</td>
<td>31 July</td>
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<tr>
<td>Peru</td>
<td>16 August</td>
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Background

To accelerate a change in the way governments, societies, and the business sector use and manage water, UN Secretary-General Ban Ki-moon and World Bank Group President Jim Yong Kim
convened the High Level Panel on Water (HLPW) in January 2016. The HLPW aims to provide the leadership required to champion a comprehensive, inclusive, and collaborative way of developing and managing water resources, and improving water and sanitation related services. The members of the panel are of Heads of State from Australia, Bangladesh, Hungary, Jordan, Mauritius (co-chair), Mexico (co-chair), Netherlands, Peru, Senegal, South Africa, and Tajikistan.

A concept paper, “Valuing water: preamble and principles”, has been prepared as a discussion document for consultation with stakeholders. The paper builds on a dialogue process launched in The Hague. The first meeting on 2 February 2017 convened key experts and thought leaders who contributed to the draft. The document also draws on a wide range of key reports and documents prepared in the past 10-15 years, including a set of position papers on valuing the cultural, spiritual, and environmental dimensions of water as the basis for ecological and human well-being.

It is expected that a revised version of the concept paper will be presented at Stockholm World Water Week in August 2017. During the period of May-August 2017, the HLPW seeks reactions to the concept paper from a cross-section of stakeholders from various parts of the world.

GWP - a neutral multi stakeholder platform

GWP has considerable experience providing a neutral platform at national and regional levels where a diversity of actors can come together in dialogue. For example, in 2013-2014 GWP undertook an extensive series of 29 national consultations on the framing of a dedicated water goal as part of the post-2015 development agenda. The outputs of these consultations became a key input to the final advice provided by UN-Water to the Open Working Group on Sustainable Development, as well as supporting national governments to negotiate specific sustainable development goals and targets.

FOOD SECURITY


Full article

The current world population of 7.6 billion is now projected to reach 9.8 billion by 2050. As that number grows, so too do concerns about the environment, development, and food security. World Population Day (July 11) seeks to bring awareness to the challenges ahead.

IFPRI’s International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT) helps researchers explore the effects of rising population on the global demand for food and on regional dietary changes. As demand for food increases with expanding population and
incomes in developing countries rise, the composition of diets will tend toward more nutrient-dense foods. As depicted in the upper chart, left, demand for staple crops rises slightly faster than global population, increasing about 50 percent. At the same time, the demand for higher value foods such as meat, dairy, and eggs and fruits and vegetables, will grow 70 and 90 percent, respectively.*

Economic growth and changing preferences are also driving shifts in food demand at the regional level. As shown in the second chart, diets in high income regions like North America are not expected to dramatically change when compared to growing low and middle income regions like South Asia and Africa south of the Sahara. Per capita calorie consumption of fruits and vegetables is expected to more than triple by 2050 in South Asia compared to 2010. Per capita calories from animal products are projected to grow 70 percent in Africa south of the Sahara over the same period.

Most of the population growth in these regions is driven by India and Nigeria. India, the world’s second most populous country with 1.3 billion inhabitants, is expected to surpass China in roughly seven years. Nigeria, with the world’s fastest-growing population, will become the third largest country shortly before 2050. According to the UN, nine countries will account for half of the world’s population growth during this period, with two in South Asia: India and Pakistan, and five in Africa south of the Sahara: Democratic Republic of the Congo, Ethiopia, Nigeria, Uganda, and United Republic of Tanzania. As rising incomes improve access to food for more and more people, current trends in agriculture will present challenges for meeting this demand sustainably. For instance, changing temperatures and precipitation patterns, along with increased weather variability, will likely slow regional growth in food production. There is also limited scope for expansion of crop and pastureland, continuing competition for productive resources, and growing water scarcity. These trajectories—and their implications for food security, nutrition, health, and the environment—could change depending on policy and investment decisions made in the coming decades. Global policy makers, governments, and businesses must work together to increase productivity, encourage and deploy new technologies, improve supply chains, and inspire innovation. More information on alternative scenarios is available in various recent publications from IFPRI, the CGIAR Research Program on Policies, Institutions, and Markets, and Nature Climate Change.

AGRICULTURAL DEVELOPMENT

Two pronged approach needed to minimize climate change, advance agricultural development -Agri. Minister. Guyana Ministry of Agriculture, July 13, 2017

Full article

A concerted effort has been launched by the Ministry of Agriculture to promote investments opportunities in Guyana’s intermediate savannahs, part of a two-pronged approach aimed at dealing with climate change and its effects on agriculture here.
Agriculture Minister Noel Holder and a team of officials from key agencies, made a presentation to the Regional Democratic Council of Region 10, Upper Demerara-Upper Berbice, outlining the scope of agriculture potential available for development in the region’s savannah lands.

In his preamble prior to the PowerPoint presentation on the intermediate savannahs and the opportunities that await investors, Minister Holder stated that while mitigation doesn’t only assist in the improvement of the country’s economy, but also prevents economic losses.

” In this regard, the hinterland and Intermediate Savannas of Region 10 have been earmarked as Guyana’s new agricultural frontier, as the country continues its quest to narrow the gap between the coastland and hinterland regions,” the Minister said.

The Ministry of Agriculture has since commenced construction of Agricultural stations in the major eco-zones including one at Ebini, in Region 10. These stations demonstrate the agricultural potential of the area, such as orchards, nurseries and seed production as well as breeding herds of cattle and small ruminants to provide breeding stock for farmers and seed stock for entrepreneurs.

“ There is no doubt in my mind that Region 10 is vital to the development of Guyana. It is centrally located in the heart of the country, bordering seven other regions, and has a span over the major rivers. More so, it has a geo-strategical position as a gateway to Brazil. As His Excellency, the President said, “This region is unique…..There’s no other Region like this that is so well connected, well wired to the whole country other than the Upper Demerara-Berbice Region,” Minister Holder stated.

To ensure the success of the model for the agricultural development of the Intermediate Savannas, good planning and governance are necessary for both social and economic development.

To this end, a number of studies have already been effected and incorporated in a detailed plan to make the development of the Intermediate Savannas a feasible and ‘bankable’ proposition. Among those are:-

- The preparation of a detailed Land Use Plan
- A Road, River and Air Transport Plan
- A Water Supply and Distribution Plan
- An Institutional, Organisational and Management Framework
- A Social Services Plan
- A Physical Infrastructure Plan
- A plan for Agricultural Support Services
- An Agro-Industrial Plan
- An Environmental Impact Assessment and Environmental Protection Plan and
- A study of the area’s Eco-Tourism potential.

Meanwhile, Regional Chairman, Renis Morian, in welcoming the development, stated that the intervention by the Ministry is a timely one which will significantly aid the advancement of Agriculture in the region.

He added that while work has been done in the past much more needs to be done.
“We are indeed happy that the Ministry of Agriculture will be working with the Region to advance our agricultural potential, however, much more can be done and I am adamant that this will birth something spectacular,” the Chairman added.

The Intermediate Savannahs cover areas of approximately 2,700 aqkm or 270,000 hectares. It consists of 70 percent forest and 25 percent of savannah lands and comprise five discrete areas:-

- The Kimbia/Ebini Savannah (East of the Berbice River)
- The Wiruni Savannah (West of the Berbice River)
- The Ituni/Tacama Savannah (West of the Berbice River)
- The Kibilibiri Savannah (West of the Berbice River) and
- The Eberoabo Savannah (West of the Berbice River)

The development model for the Intermediate Savannahs speaks to a period of about 20 years and points to successful identified crops suitable for the soils types there. These include soybean, citrus, peanuts among others. The rearing of livestock as is the case at the GLDA’s pilot station at Ebini is another successful venture underway.

**OECD-FAO AGRICULTURAL OUTLOOK**


**Full article**

Brazil will overtake the United States as the world’s largest soybean producer in the coming decade, while the increase in maize production will be driven mainly by Latin America, according to the new OECD-FAO Agricultural Outlook 2017-2026 report.

The report, published today, provides ten-year projections to 2026 for the major agricultural commodities.

It states that Argentina and Brazil experienced the strongest expansion in crop areas over the past ten years, adding respectively 10 million hectares and 8 million hectares to global crop land. For the next ten years, crop land expansion is expected to be in a similar range for these two countries.

**Increase in global maize production will be driven mainly by Latin America.**

Over the outlook period (2017-2026), global cereal production is set to grow by around 1% per annum, leading to a total increase by 2026 of 11% for wheat, 14% for maize, 10% for other coarse grains, and 13% for rice.
In the case of maize, area expansion accounts for only 10% of the total increase in production, driven mainly by growth in the area under cultivation in Latin America, which increases by 6.6% from 33.5 million hectares in the base period to 35.7 million hectares in 2026.

Latin America will contribute 28% of the total increase in maize production, or 39 million tonnes. Of this, around one-quarter is due to the increase in area. Asia and Pacific will account for 24% or 33 million tonnes. In contrast with Latin America, the growth in Asia and Pacific will be driven almost exclusively by yield gains. North America will contribute 31 million tonnes or 22% of the total increase. Together, these three regions will account for 74% of the total increase.

**Brazil is projected to overtake the United States as the largest soybean producer**

During the outlook period, global soybean production is expected to continue to expand, but at 1.9% per annum, which is well below the growth rate of 4.9% per annum of the last decade.

Brazil soybean production is expected to grow at 2.6% per annum, the fastest of the major producers as more additional land is available, compared to Argentina (2.1% per annum) and the United States (1.0% per annum).

Consequently, Brazil is projected to overtake the United States as the largest soybean producer. Exports of soybeans in 2026 will be dominated by Brazil and the United States, which together account for nearly 80% of global exports.

**Meat, sugar, milk**

Although developed countries are expected to account for slightly more than half of global meat exports by 2026, their share decreases steadily relative to the base period.

On the other hand, the share of the two largest meat exporting countries, Brazil and the United States, in global meat exports is expected to increase to around 44%, contributing to almost 70% of the expected increase in global meat exports over the projection period.

The market for meat will see its concentration grow as suppliers in the Americas benefit from higher productivity and favorable local supplies of feed grain, as well as exchange rate depreciation in Brazil and Argentina.

The concentration ratio for poultry in 2026 will be driven by growth from Brazil, the United States and the European Union. For beef, market concentration will also increase by 2026, driven by growth in Brazil and Australia.

The projected depreciation over the medium term of the Argentinian and Brazilian currencies with respect to the United States dollar will encourage growth in milk exports from these countries as they become more competitive.

Sugar exports are projected to remain concentrated, with 48% originating from Brazil where sugar cane production is shared between supply of sugar -of which 72% are exported- and ethanol for domestic use.
Biofuels

Brazilian ethanol demand is expected to expand by 6 billion liters over the outlook period. The Brazilian biodiesel mandate should reach 10% by 2019, leading to an increase in production of more than 40% over the next ten years.

In Argentina, it is assumed that the 12% blending mandate for biodiesel and ethanol will be fulfilled by 2020. Argentinean biodiesel production should be also driven by US import demand to meet the latter’s advanced mandate.

Brazilian ethanol exports are not expected to expand as US ethanol is likely to remain cheaper over the outlook period.

Argentina is expected to be a major biodiesel exporter with most exports directed towards the United States. The future of European biodiesel anti-dumping duties is an important uncertainty in the evolution of biodiesel trade.

A slowdown in growth of ethanol production is expected over the course of the outlook period. Annual growth in ethanol production is expected to be around 1% per year.

The slowdown of ethanol growth is driven in large part by a stagnating mandated ethanol use in the United States, whereas the demand for transportation fuels in Brazil is expected to be sustained.

TRADE


Full article

Grenada will launch its National Export Strategy on Thursday July 27, 2017. This new strategy will be implemented over a period of five years, 2017-2021, with the aim of boosting Grenada’s exports.

Honourable Oliver Joseph, Minister of Economic Development, Planning and Trade will receive the strategic document, from the Commonwealth Secretariat, in the presence of the Consultants and Government Officials. Stakeholders from the private and public sectors including Permanent Secretaries; and representatives from Civil Society Organisations, Export Facilitating Agencies and Academia will also be in attendance.

Over the past year, the Commonwealth Secretariat has been working with the Government of Grenada, through the Division of Trade, to complete the National Export Strategy. Through active participation from key stakeholders, which involved extensive exercises, workshops, sector groups’ sessions and a national consultation, six (6) priority sectors that have potential to increase
exports were identified, as follows:

1. Agriculture and Fisheries – Agro-processed products, fishery products, cinnamon, cocoa, nutmeg, soursop and cloves;

2. Creative Industries – art and craft industry, audio visual industry, film industry, fashion industry;

3. Health and Wellness – herbs and spices and therapeutic tourism;

4. Maritime and Yachting Services;

5. Tourism; and

6. Professional Services – Management Consulting and Information Communication Technology (ICT)

These sectors were chosen in tandem with an assessment of the economy’s potential and its ability to spur growth and sustain development in those areas.

In addition to the above, seven (7) cross-cutting challenges that affect the priority sectors as well as other sectors were identified. They are as follows:-

1. Access to Finance;

2. Cost of Finance (when it is accessible);

3. Technical Skills;

4. Market Intelligence;

5. Transport;

6. Quality of Products and Services; and

7. Market presence in foreign countries

The Strategy looked at the main aspects of the enabling environment which warrants focused and targeted interventions to increase the country’s supply capacity.

This involves boosting the country’s ability to produce good quality products at a competitive price, lowering the transaction costs of trading across borders and creating new opportunities for the country’s producers to penetrate regional and global markets, as reflected in the strategy’s vision.

Further, the document established a strategic action plan and an implementation framework to assist key agencies to execute their plans; and to measure and monitor the implementation progress. It must be noted that a National Implementation Coordinating Team (NICT) is already
appointed to ensure successful implementation of the action plan.

The National Export Strategy relies on strong Private-Public Partnership, including, dedicated accountable agencies and reliable support services system to achieve successful implementation.

AGRICULTURAL RESEARCH

CGIAR welcomes the establishment of the Netherlands-CGIAR partnership. Consultative Group for International Agricultural Research, 11 July 2017. [Link](http://www.cgiar.org/consortium-news/cgiar-welcomes-the-establishment-of-the-netherlands-cgiar-partnership/)

Full article

**Montpellier, France:** CGIAR welcomes the establishment of a new multi-year Netherlands-CGIAR partnership program to strengthen collaboration in agri-food system research for development.

The Netherlands just confirmed a new financial commitment to CGIAR’s work in agricultural research. This commitment includes an allocation of EUR 64.8 million (2017-19) towards Window 1 and 2 funding.

A second allocation of EUR 15 million (2017 – 2021) will go towards strengthening CGIAR and Dutch partnership opportunities. The contribution underlines The Netherlands’ long term commitment to CGIAR and to advancing agri-food system science and innovation to build resilient and sustainable food systems around the world.

The Netherlands contribution will support the following CGIAR Research Programs and Platforms: [Genebank Platform](#); [Agriculture for Nutrition and Health](#); [Climate Change, Agriculture and Food Security](#); [Water, Land and Ecosystems; Forests, Trees and Agroforestry](#) and [Policy, Institutions and Markets](#) including the [CGIAR Collaborative Platform for Gender Research](#).

“Today, we recognize the Government of the Netherlands for their commitment to CGIAR and their endorsement that agricultural research has a vital role to play in achieving the sustainable development goals. Partnerships like this are absolutely critical in the multi-stakeholder context of food and agriculture,” said Elwyn Grainger-Jones, Executive Director of the CGIAR System Organization. “With this multi-year contribution, The Netherlands has ensured that their contribution can be utilized in the most efficient way and that it is strongly aligned to CGIAR’s long term vision.”

The Netherlands joined CGIAR in 1971 as a founding member and sharing a longstanding and fruitful partnership through which they have contributed financial, scientific and technical resources and expertise. CGIAR [Research Centers](#) and [Research Programs](#) have a long history of collaboration with leading Dutch universities, advanced research institutes and development organizations, including the [IRC](#) (formerly the International Water and Sanitation Centre), the
Most recently, The Netherlands hosted the CGIAR System Council meeting in Amsterdam in May 2017 and the secretariat of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) relocated to Wageningen University, The Netherlands in February 2017.

“We are looking forward to the great work we can do in partnership with CGIAR to create the knowledge base required for transforming food systems for the good of women, men and children in Africa and other developing and emerging economies,” said Dr. Melle Leenstra, Knowledge Policy Coordinator at the Food and Nutrition Security Cluster with the Inclusive Green Growth Department at the Netherlands Ministry of Foreign Affairs.

The agreement focuses on collaboration in key strategic areas including food, nutrition and health; inclusive and sustainable agricultural growth with a focus on pro-poor value chains and market transformations that better link farmers to markets and ecologically sustainable food systems for climate-smart, resilient agriculture.

YOUTH


Full article

“In many developing countries, the labor market has left a high proportion of young people out of employment and unable to sustain their livelihoods,” explains Dr. Netsayi Mudege, leader of the ‘Gender equity and youth employment’ research cluster (CC5.3) of the CGIAR Research Program on Roots, Tubers and Bananas (RTB).

“Under such conditions, agriculture related youth programs and youth oriented research can provide an opportunity to build a critical mass of young women and men farmers with skills and capacity to take up opportunities in the agricultural sector and improve their livelihoods. However, agriculture has to be attractive to young people and offer a viable alternative livelihood,” she adds.

RTB has prioritized tackling these issues through a dedicated research cluster (CC5.3) which is housed under the program’s Flagship project 5 on ‘Improving livelihoods at scale’. The cluster team came together for a ‘youth reflections day and cluster kick off meeting’ from May 26 – 27 in Amsterdam, to develop a joint vision on strategy and research ideas that will guide their agenda in the coming years. A total of 14 participants attended from the International Potato Center, Bioversity International, International Institute of Tropical Agriculture as well as two participants from the World Agroforestry Centre and one participant from the International Maize and Wheat Improvement Center who were invited to share their perspectives and learn from the RTB work.
On the first day, Jim Sumberg, from the Institute of Development Studies at the University of Sussex, Brighton, accompanied and guided the team in its reflection and understanding of current issues on youth in agriculture, including existing theories and methodologies. “Young adults have multiple identities – daughter/son, students, farmer, laborer, migrant, spouse, parents – we need to avoid simplistic labels and illusions of linearity, as youth is a dynamic and not a homogenous category,” he said.

The team began by discussing the cluster’s approach to youth in agriculture, and the entry point for the youth strategy to be developed. Reflections about the myriad issues affecting youth, and understanding what has already been studied and done is crucial to define the gaps and formulate the new strategy and research agenda.

One participant summed up why it was important to focus on youth issues in RTB as follows: “A central problem is how young people currently engage in agriculture and how we can keep them engaged and help them build solid livelihoods strategies. We need to understand the needs of young people and men and women in a constantly changing rural environment.”

The rural landscape is being transformed through the introduction of technologies and ICTs; climate change is also affecting rural livelihoods and households have to change to be able to adapt. Young people are receiving more education which has also led to changes in their aspirations. A youth responsive agriculture research approach needs to incorporate and address these transformations if agriculture is to become a viable livelihood option for young people.

To define a vision and mission for RTB youth work, the team will conduct research to understand and define the drivers and opportunities for the involvement of young men and women in the rural economy. Young people are embedded in social relations that are also characterized by power hierarchies and these can shape their opportunities.

Currently the team has been engaged with the GENNOVATE, a global comparative research initiative which addresses the question of how gender norms and agency influence men, women and youth to adopt innovation in agriculture and natural resource management. Initial findings include that young people are not interested to stay in agriculture and parents aspire for their children to have occupations outside of agriculture as it is perceived to be a ‘dirty job’, involve hard manual labor and not a sustain livelihood. Young people often view agriculture as an option when other options have failed. The team will use some of the findings from such studies to help define the youth strategy for RTB and ensure that RTB researchers understand the opportunities and potential impact on the involvement of young people.

In line with this, cluster researchers will develop a framing paper for youth research and approaches in RTB. This framing paper will consist of a literature on youth, define broader conceptual frameworks and approaches as well as try to identify broad research questions for RTB to engage with. The paper will provide a critical building block for the development of an RTB youth strategy which will outline how to engage with youth (young men and women) in a meaningful way.
http://gisbarbados.gov.bb/blog/agricultural-sector-needs-more-youth/

Full article

Minister of Labour, Social Security and Human Resource Development, Senator Dr. Esther Byer Suckoo has re-iterated the importance of youth involvement in the future viability of the local agriculture sector.

She expressed this view recently while addressing the graduation ceremony of the Youth Farm 2016 held under the aegis of the Inter-American Institute on Cooperation in Agriculture, (IICA) in Building No.2, Harbour Industrial Estate, St. Michael.

Senator Byer Suckoo pointed out that while careers in medicine, pharmacy, plumbing, legal, engineering and information technology were important, so too were the skills of agricultural workers.

“‘My message to you [graduates] is simple – We need you. Whether it is [pursuing opportunities] as crop scientists, soil scientists, plant breeders, crop farmers, livestock farmers or greenhouse specialists, we need you all,” she insisted.

Emphasising that the majority of farmers in Barbados and across the Caribbean were well advanced in age, she said the possibility existed that the sector could stagnate in the future if not enough young people “stepped up” to carry on the work.

“When the older farmers are no longer able to till the land, then we would see a diminution of the activities and we would also see a stagnation of the energy and techniques of the older farmers. With every endeavour you need younger people to bring new ideas to continue to bring life and sustainability to the activities,” Senator Byer Suckoo underlined.

The Labour Minister said Government was committed to providing opportunities for the youth and embracing partnerships that fostered education and growth – a situation which she described as “high on the agenda”.

During the event, the participants received certificates and special prizes for outstanding performances in their Caribbean Vocational Qualification Level 1 qualification and on their job attachments.
UPCOMING EVENTS

July
Caribbean Food Crops Society (CFCS) Annual Meeting
Date: July 16-22, 2017
Location: Puerto Rico
Description: The theme for the meeting is: The Role of the Caribbean as a Research Hub to Advance Global Agriculture and Food Security.
Website: http://cfcs.eea.uprm.edu/article/annual-meeting-cfcs-puerto-rico-july-16-22-2017-call-submission-presentations-deadline-exten

August
Denbigh Show, Jamaica
Date: August 5-7
Location: Denbigh Showground, May Pen, Clarendon,
Website: http://www.jas.gov.jm/Denbigh.html

32nd West Indies Agricultural Economics Conference 2017
Date: 6-11 August 2017
Location: Georgetown, Guyana
Description: Theme: Food & Nutrition Security: the pathway to sustainable agricultural development in the Caribbean. Organised by Caribbean Agro-Economic Society
Website: http://www.caestt.com/home/32nd%20W.I.A.EConference.php

September
Caribbean Wellness Day
Date: 9 September 2017
Description: Theme: "A Brighter Future for our Youth". Focus is on youth ages 15-29
Website: http://carpha.org/

Agribusiness Expo 2017
Date: 28 September- 1 October 2017
Location: Grenada
Description: Hosted by Ministry of Agriculture, Grenada. Theme: "Agribusiness generating wealth, wellness and employment”
Website: http://www.gov.gd/

October
World Food Day
Date: 16 October 2017
Description: Theme is “Change the future of migration. Invest in food security and rural development”.
Website: http://www.fao.org/world-food-day/2017/home/en/

November
TropAg2017
Date: 20-22 November, 2017
Location: Brisbane, Australia
Description: Theme is “high impact science to nourish the world”, reflecting the critical role of science, technology and innovation to the many challenges facing tropical and sub-tropical agriculture and food production globally.
Website: [http://tropagconference.org/](http://tropagconference.org/)

December
CARDI Day
Date: 5 December 2017

2018
October 2018
18th International Triennial Symposium of the ISTRC (International Society for Tropical Root Crops) will be in Cali, Colombia from 22nd to 26th October 2018.